shallow. Here we found *Planorbis trivolvis*, *P. bicarinatus, Limnaa desidiosa* and *Goniobasis livescens*. Among the latter there were many which connected *livescens* with *depygis*, having well marked color bands and a purple timed columella.

The last stop was made at Lockport where the train waited over an hour, and while the majority of the party studied the bear trap dam, the conchologists "pocketed" their cans and bottles and climbed (or fell) to a good sized creek (a branch of the Desplaines River). Limnea palustris was here so abundant that it could be collected by the quart, and they were all large, fine specimens. Many specimens were very long and pointed and seemed to show a tendency toward L. reflexa. The stream was very rapid, and Limnæa and Planorbis seemed to be the only genera able to live in any numbers. Physa was abundant dead, but only three or four living specimens could be found. It decidedly prefers still water in this region. A single specimen of L. palustris was found in which the base had suffered some injury, and the aperture was thrown off to the right, leaving a wide and deep false umbilicus. We collected here Limuca palustris, L. caperata, L. humilis, Planorbis trivolvis, P. bicarinatus, Aplexa hypnorum and Physa heterostropha.

*Physa heterostropha* at this locality shows a wide range of variation. Some are long and cylindrical, others broad and stumpy, and the spire runs from obtuse to pointed. The number of whorls was invariably the same. In this lot one could easily pick out such pseudo species as gyrina, cylindrica, parva, oleacea and sayii. The writer has recently tried Crosse and Fischer's suggestion in regard to specific characters in the form of the teeth on the radula, but thus far with a decidedly negative result.

The results of the field day, conchologically, may be summed up as follows: Pleistocene species 8, recent species 19. We carried home several quarts of mollusks.

# A NEW SPHÆRIUM.

# BY F. C. BAKER.

Sphærium lilycashense sp. nov.

Shell differing from typical *striatinum* in being larger, more regularly oval, much more inflated and with the umbones more inflated

### THE NAUTILUS.

and placed nearer the centre; the posterior end is broadly rounded in the variety, while in the typical form it is much produced and somewhat ram-shaped; the color varies from light yellowish horn to rather dark horn, with an occasional zone of yellowish; the surface is smooth and polished, the growth lines being faint on the umbones, but stronger on the ventral border.

Length 14.00, height 11.00, breadth 8.50 mill.

Length 12.50, height 9.75, breadth 7.50 mill.

Habitat.—Lilycash Creek, near Joliet (coll. by J. H. Handwerk). This variety was referred to Dr. V. Sterki by Mr. Handwerk, and considered by him to be an unusal form of *striatinum*, but he did not consider it distinct from the typical form. After examining a large number of specimens the writer has concluded that it is a form distinct enough for a specific name. Its beautiful polished surface and inflated shell will at once distinguish it from *striatinum*. It is shaped differently from *stamineum* and the beak sculpture is very much finer.

Another form is found associated with the variety which is in a sense intermediate between the typical form and the variety, having a more oval shell than the type, but not being so much inflated as the variety; it is very dark chestnut or dark brown in color. Several specimens of this form had the hinge wholly or partly inverse.

#### DESCRIPTION OF A NEW SPECIES OF OLIVELLA.

# BY JOHN FORD.

Olivella Blanesi n. sp.

Shell ovate, white, somewhat translucent, ornamented with three spiral series of irregularly formed crimson spots, one (of very small spots) at the suture, the others central and basal; the rest of the surface showing a faint reticulation of the same color in some specimens. Whorls 5, spire produced, rather acute; suture chanelled. Aperture half the length of the shell, acuminate above, widest below the middle; basal notch wide, columella very short, vertical, cylindrical and smooth, making a decided angle with the parietal wall, forming a deep sinus; basal fasciole smooth.

Length 8.9, diam. 3.8, length of aperture 4.75 mm. Length 7.5, diam. 3.2, length of aperture 4 mm. *Locality.*—Cardenas, Cuba.

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